

**STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION**

IN THE MATTER OF:)	DIVISION OF WATER
)	POLLUTION CONTROL
TENNESSEE DEPARTMENT OF)	
TRANSPORTATION)	CASE NO. 02-0720
)	
)	
RESPONDENT)	

AMENDED CONSENT ORDER AND AGREEMENT

This Amended Consent Order and Agreement is made and entered into by and between the Tennessee Department of Environment and Conservation and the Tennessee Department of Transportation. This Amended Consent Order replaces and supersedes the Consent Order and Agreement executed by these agencies on December 18, 2002, and thereafter filed with the Davidson County Chancery Court under Docket No. 02-3821-III. This Amended Consent Order (hereinafter referred to as the "Consent Order" or the "Order") shall become effective upon being executed by the respective commissioners of these departments.

PARTIES

I.

Betsy L. Child is the duly appointed Commissioner of the Tennessee Department of Environment and Conservation (hereinafter the "Department" or "TDEC").

II.

The Tennessee Department of Transportation (hereinafter "Respondent TDOT" or "TDOT") is a Department of state government organized under and existing by virtue of the laws of the State of Tennessee.

JURISDICTION

III.

Whenever the Commissioner has reason to believe that a violation of Tennessee Code Annotated (hereinafter "T.C.A.") Section 69-3-101 *et seq.*, the Water Quality Control Act, (hereinafter the "Act") has occurred, or is about to occur, he may issue a complaint to the violator and he may order corrective action be taken pursuant to T.C.A. § 69-3-109(a) of the Act. Further, the Commissioner has authority to assess civil penalties against any violator of the Act, pursuant to T.C.A. § 69-3-115 of the Act; and, has authority to assess damages incurred by the State resulting from the violation, pursuant to T.C.A. § 69-3-116 of the Act. Department Rules governing general water quality criteria and use classifications for surface waters have been promulgated pursuant to T.C.A. § 69-3-105, and are effective as the *Official Compilation, Rules and Regulations of the State of Tennessee*, Chapters 1200-4-3 and 1200-4-4 (the "Rule").

IV.

T.C.A. § 69-3-108 requires an individual to obtain a permit from the Department prior to the development of a natural resource or the construction of any establishment that will, or is likely to cause an increase in the discharge of wastes into the waters of the state. Pursuant to T.C.A. § 69-3-108, Rule 1200-4-10-.05 requires a developer to submit

prior notification to obtain coverage under this rule for storm water discharges associated with construction activity for any construction activity that disturbs five or more acres of land.

V.

Locke Branch, White Oak Branch, Kelley Creek, Turnbull Creek, Drivers Branch, Camp Branch, Indian Creek, and their unnamed tributaries, referred to herein, are "waters of the state", as defined by T.C.A. § 69-3-103(33). Pursuant to T.C.A. § 69-3-105(a)(1), all waters of the state have been classified by the Tennessee Water Quality Control Board for suitable uses. Department Rule 1200-4-4, "Use Classifications for Surface Waters, et al", is contained in the *Official Compilation, Rules and Regulations for the State of Tennessee*. Accordingly, these water bodies have been classified for the following uses: fish and aquatic life, recreation, irrigation, and livestock watering and wildlife. Further, the Division of Water Pollution Control (hereinafter the "Division") has designated Kelley Creek as high quality waters.

VI.

The Respondent is a "person" as defined at T.C.A. § 69-3-103(20). As hereinafter stated, the Respondent has violated the Act.

FACTS

VII.

On June 28, 2002, the Division received a Notice of Intent (hereinafter "NOI") signed by representatives of the Respondent for coverage under the Construction General

Permit For Storm Water Discharges from Construction Activities (hereinafter the "permit" or the "CGP"). The NOI sought coverage for the portion of the State Route 840 project in Williamson County from State Route 100 to Bending Chestnut Road (hereinafter "the SR 840 site"). A Notice of Coverage (hereinafter "NOC") was issued to the Respondent on July 23, 2002, under tracking number TNR190190. The permit requires the development of a Storm Water Pollution Prevention Plan (hereinafter "SWPPP") and the installation and maintenance of Best Management Practices (hereinafter "BMPs"). Further, the permit requires quarterly inspection reports be submitted to the Division for sites discharging to high quality waters. Coverage under the permit expires May 31, 2005.

VIII.

Vaughn Contractors, Inc., (hereinafter "Vaughn") is an active corporation authorized to conduct business within the state of Tennessee. Vaughn was contracted by Respondent TDOT to construct a portion of SR 840 in Williamson County, Tennessee.

IX.

As of the time of the inspections described in this Order, construction was not under way along the entire SR 840 site, but was proceeding in at least three areas. The furthest to the southeast is at the intersection of the SR 840 route and State Route 46 ("southeast area"). The middle area is along a ridge that drains to White Oak Branch and an unnamed tributary to White Oak Branch ("middle area"). The third area is toward the northwest end of the SR 840 site in a portion that drains to Turnbull Creek ("northwest area").

X.

On October 1, 2002, the Director of the Division issued an Order against Vaughn for violations of the Act at a waste material disposal site off the right of way of SR 840 where material from the SR 840 construction was being disposed. That disposal site is close to the middle area of the SR 840 site in the top of a hollow that drains to an unnamed tributary to White Oak Branch. That tributary also receives drainage from the northern side of the SR 840 right-of-way.

XI.

On August 5, 2002, Division personnel inspected the southeast area at the intersection of SR 840 construction and SR-46. Division personnel observed large areas of disturbance, approximately 100 acres, associated with the construction of SR 840, access ramps, and the realignment of SR-46. Storm water discharges from the portion of the southeast area south of SR-46 into two unnamed tributaries to Locke Branch and Locke Branch. These tributaries are hereinafter referred to as "UTLBE" and "UTLBW" to indicate the eastern tributary and western tributary to Locke Branch. Storm water discharges from the portion of the southeast area north of SR-46 into two unnamed tributaries to Kelley Creek. These tributaries are likewise referred to as "UTKCE" and "UTKCW" to indicate the eastern tributary and western tributary to Kelley Creek. Erosion prevention and sediment controls (hereinafter "EPSCs") had not been installed on much of the SR 840 site. EPSCs that were installed had not been maintained and were ineffective. Sediment deposits were observed down slope of rock check dams and

sediment traps. Division personnel met with the Respondent and discussed corrective actions necessary to bring the SR 840 site into compliance with the permit.

XII.

On August 20, 2002, Division personnel returned to the southeast area of the SR 840 site and inspected the stormwater discharge points south of SR-46. The UTLBE and the UTLBW below these discharge points contained sediment deposits ranging from one to two inches deep.

XIII.

On August 27, 2002, Division personnel returned to the southeast area of the SR 840 site and found that the installed EPSCs were still ineffective. Areas of silt fencing were not properly installed and evidence of severe erosion of soil from the site was observed. Sediment deposits of up to approximately 12 inches in depth were observed in the UTLBE. Division personnel informed Respondent TDOT of the problems observed at the site and requested that corrective action be taken.

XIV.

On September 3, 2002, the Division issued a Notice of Noncompliance (hereinafter "NONC") to Respondent TDOT for violations observed during the SR 840 site inspections on August 20 and 27, 2002. Respondent TDOT was informed that the site was not in compliance with the CGP and Respondent TDOT was required to revise and submit the SWPPP by September 20, 2002. Respondent TDOT was further instructed to properly install and maintain EPSCs to prevent further release of sediment

from the construction site. The NONC stated that further releases would result in enforcement actions.

XV.

On September 10, 2002, Division personnel returned to the southeast area of the SR 840 site to inspect the receiving streams. Sediment deposits ranging from 1/8 to 1/4 inch in depth blanketed the UTLBE and the Locke Branch stream channels.

XVI.

On September 19, 2002, Division personnel inspected the northwest area of the SR 840 site and the two watercourses that flow from it to Turnbull Creek. The watercourse that is further to the northwest starts as a wet weather conveyance and becomes a headwater stream before it reaches Turnbull Creek. Sediment deposits of up to 3 to 4 inches were observed in the wet weather conveyance and headwater stream. Division personnel observed evidence of releases of sediment from the site to these watercourses.

XVII.

On September 23, 2002, the Division received a revised sediment and erosion control plan, in response to the NONC. It depicted most, but not all of the EPSCs that were employed at the SR 840 site.

XVIII.

Also on September 23, 2002, Division personnel performed a follow-up inspection to one performed on September 20, 2002. The September 20, 2002, inspection

occurred during a rain event when muddy water was observed discharging from both the northwest area and the southeast area of the SR 840 site. On September 23, 2002, Division personnel conducted an inspection of the receiving streams that drain the southeast area of the site and observed sediment deposits in: the UTKCW approximately 1/4 inch in depth; Kelley Creek ranging from 1/8 to 1/4 inch; the UTLBE ranging from 2 to 6 inches; and the UTLBW ranging from 1/8 to 1/4 inch.

XIX.

On September 28, 2002, Division personnel conducted an inspection of the middle area of the SR 840 site that drains into an unnamed tributary to White Oak Branch and White Oak Branch. Sediment deposits were observed in the unnamed tributary from its beginning downstream to its confluence with White Oak Branch. Sediment deposits were also observed in White Oak Branch from the site down to the confluence with the unnamed tributary.

XX.

On September 5, September 30, and October 2, 2002, the Division received citizen complaints regarding sediment discharges to Locke Branch, White Oak Branch, and Kelley Creek. Each complaint identified the source as a result of the construction of SR 840. Photographs taken September 27, 2002, document extremely high turbidity and heavy sediment loads in Locke Branch, White Oak Branch, Kelley Creek, and their unnamed tributaries. Stream conditions, runoff opacity, and deposits of sediment described in the complaints and recorded by the photographs are consistent with observations of the Division.

XXI.

On or about September 30, 2002, the Division sent the Respondent a Notice of Violation (hereinafter "NOV"). This NOV described the observations of the inspections of September 19, 20, and 23, 2002. It also directed the Respondent to immediately implement appropriate EPSCs, to submit a plan for the removal of sediment from affected streams within 30 days, and within 15 days of Division approval of the plan, to begin implementation of the plan for removal of sediment.

XXII.

On October 3, 2002, Division personnel conducted an investigation of the SR 840 site in response to the complaints received the evening of October 2, 2002. EPSCs on the site were not properly installed and were ineffective. Heavy sediment deposits were observed in White Oak Branch and its unnamed tributary. Division personnel advised Vaughn of the violations observed at the site and requested action be taken to correct the problems.

XXIII.

On October 8, 2002, Division personnel returned to the SR 840 site and found that the Respondent had not taken further actions to prevent additional erosion or control sediment migration to the streams. EPSCs already present were not properly installed or maintained. White Oak Branch appeared turbid and sediment deposits were observed in the channel.

XXIV.

On October 10, 2002, Division personnel met with Vaughn at the SR 840 site to discuss planned EPSCs to be implemented on the site. Sediment deposits ranging from ½ inch to 1 inch were observed in an unnamed tributary to White Oak Branch. White Oak Branch contained sediment deposits ranging from ½ inch to 2 inches and was extremely turbid. The EPSCs incorporated at the site continued to be ineffective.

XXV.

On October 24 and 25, 2002, Division personnel conducted another inspection of the SR 840 site. On October 24, 2002, observations were made of the southeastern area and tributaries to Locke Branch. There was evidence of discharges from the site into both the eastern tributary and western tributary. The UTLBE had deposits of up to 8 inches. There were deposits in Locke Branch below the confluence with UTLBE of 1 to 2 inches. The UTLBW had sediment deposits also. In the middle area of the site, both White Oak Branch upstream of the confluence with the unnamed tributary and the unnamed tributary to White Oak Branch exhibited sediment deposits. On October 25, 2002, Division personnel observed sediment in Kelley Creek at a number of locations downstream of White Oak Branch. On that occasion, the areas in Kelley Creek with the most sediment were just below the confluence with White Oak Branch and UTKCW and UTKCE. Tributaries to Kelley Creek that did not receive runoff from SR 840 construction were not observed to be contributing sediment. These tributaries were not turbid, and they did not exhibit deposits of sediment that resembled material from SR 840. Finally, on October 25, 2002, the watercourses draining from the northwest area of the site to Turnbull Creek

were observed to have received sediment, with deposits of sediment ranging from 1 to 3 inches.

XXVI.

After the issuance of the NOV's for the SR 840 site, TDOT has taken a number of actions to improve EPSC measures on the site. Also, a new erosion control consulting firm was hired. The types of EPSC measures that have been improved include temporary berms, temporary slope drains, temporary dewatering structures, rip-rap, geotextile stabilization, erosion control blankets, seeding and mulching, use of a polymer in powder and log form, a silt fence/polymer sandwich, permeable plastic ditch berm, and jute mesh fabric. These actions have resulted in significant stabilization of the SR 840 site.

XXVII.

The problems with erosion prevention and sediment control that have occurred on the SR 840 site are indicative of problems that have occurred on other TDOT construction projects.

XXVIII.

On March 2, 2000, the division received an application from TDOT for an individual Aquatic Resource Alteration Permit (hereinafter "ARAP") for proposed alterations resulting from the expansion and realignment of State Route 26 between Dowelltown and Smithville in DeKalb County, Tennessee (hereinafter the "SR 26 site"). The application requested authorization for the construction of a retaining wall adjacent

to a stream and the extension of nine pre-existing box culverts. The reference numbers and water bodies associated with the proposed alterations are provided below:

<u>Permit</u>	<u>Activity</u>	<u>Water body</u>
00-057	Retaining wall construction	Drivers Branch
00-059	103 ft. culvert extension	Tributary to Drivers Branch
00-060	47 ft culvert extension	Tributary to Drivers Branch
00-061	43 ft culvert extension	Tributary to Drivers Branch
00-062	65 ft culvert extension	Tributary to Drivers Branch
00-063	74 ft culvert extension	Tributary to Drivers Branch
00-064	114 ft culvert extension	Tributary to Indian Creek
00-065	62 ft culvert extension	Tributary to Indian Creek
00-066	116 ft culvert extension	Tributary to Camp Branch
00-067	124 ft culvert extension	Tributary to Camp Branch

XXIX.

On January 14, 2002, the division received a Notice of Intent (NOI) to renew coverage under the Tennessee Construction General Permit for Storm Water Discharges from Construction Activities (CGP) for the SR 26 expansion and realignment. The NOI did not list a contractor for the project. On February 7, 2002, the division issued a NOC assigning tracking number TNR190169 (formerly TNR179986). Respondent later identified Rogers Group, Inc. as the contractor for the SR 26 site and an updated NOC was issued on April 25, 2002, reflecting this change.

XXX.

On April 5, May 8, May 23, June 5, June 26, July 15, and July 23, all of 2002, division personnel conducted SR 26 site inspections and observed numerous violations of CGP and ARAP conditions as well as pollution resulting from construction activities at the site. Erosion prevention and sediment controls were lacking on much of the SR 26

site and those that had been installed were ineffective and poorly maintained. The construction of culvert extensions 00-060, 00-064, and 00-065, resulted in the partial or complete blockage of the stream channel, often concealing the culvert entirely. Sediment deposits in stream channels ranging from a few inches to several feet were observed downstream of these crossings as well as at the 00-061 and 00-066 road crossings.

XXXI.

On July 31, 2002, and September 13, 2002, the division issued NOV's to the Respondent for the violations observed during the SR 26 site inspections conducted May 8, 2002, through July 23, 2002. The first NOV required the Respondent to 1) implement and maintain appropriate erosion prevention and sediment controls; 2) remove fill material surrounding the culverts and stabilize the slopes; 3) prepare and submit a plan to assess the degree of sediment contribution from the site; 4) prepare and submit a plan to assess the presence of iron or other materials introduced to the streams, 5) prepare and submit a restoration plan for the impacted streams and drain ways, and 6) perform the approved restoration work.

On September 11, 2002, the division received a response from Respondent stating that items 1 and 2 had been addressed and plans for the required assessments were submitted. A second NOV, issued September 13, 2002, listed additional violations observed in the July 23, 2002, SR 26 site inspection, including the unpermitted culvert installation and placement of fill covering a spring. The Respondent was required to submit compensatory mitigation plans for the loss of resource value resulting from these activities.

VIOLATIONS

XXXII.

By discharging sediments into waters of the state as described above, the Respondent has violated the Construction General Permit conditions referenced above, and T.C.A. §§69-3-114(a) and (b), which state, in part:

T.C.A. §§69-3-114. Causing pollution or refusing to furnish information.

- (a) It is unlawful for any person to discharge any substance into the waters of the state or to place or cause any substance to be placed in any location where such substances, either by themselves or in combination with others, cause any of the damages as defined in §69-3-103(22), unless such discharge shall be due to an unavoidable accident or unless such action has been properly authorized. Any such action is declared to be a public nuisance.
- (b) In addition, it shall be unlawful for any person to act in a manner or degree which is violative of any provision of this part or of any rule, regulation, or standard of water quality promulgated by the board or of any permits or orders issued pursuant to the provisions of this part;

XXXIII.

By failing to install and maintain proper erosion prevention and sediment controls the Respondent has violated the referenced permit.

ORDER

XXXIV.

WHEREFORE, pursuant to the authority vested by T.C.A. §§69-3-109, 69-3-115 and 69-3-116, I, Betsy L. Child, hereby order and the Respondent stipulates and agrees as follows:

A. SR 840 Corrective and Preventive Action

1. To the extent that the Respondent has not already done so, the Respondent shall, within thirty (30) days of the effective date of this Consent Order (the "effective date of this Consent Order" means the date that it has been signed by both the Commissioner of TDEC and the Commissioner of TDOT), submit to the Division for review and approval a plan to assess the degree of sediment contribution from construction activities at the SR 840 site to Locke Branch, Big Turnbull Creek, White Oak Branch, Kelley Creek, and their unnamed tributaries. The plan shall, at a minimum, include a detailed schedule of work and detailed discussion of the assessment methodology proposed.
2. Within thirty (30) days after receiving the plan, TDEC shall complete its review and either approve the plan or provide written comments to TDOT identifying why the plan cannot be approved. In the event that TDEC does not approve the assessment plan as it is submitted, the Respondent shall, within thirty (30) days of receipt of TDEC's written comments on the assessment plan, submit a revised version to TDEC that includes the necessary changes to the assessment plan. Within thirty (30) days after receiving the revised plan, TDEC shall complete its review and either approve the plan or provide additional written comments.
3. The Respondent shall initiate assessment activities, within fifteen (15) days of receipt of TDEC approval of the assessment plan, unless TDOT states in writing that a specified longer time period is required in order for

it to comply with applicable procurement requirements including without limitation the Brooks Act, in which case it shall initiate the assessment activities within the stated time period.

4. The Respondent shall, within thirty (30) days of completion of the assessment, submit for approval a plan for the restoration of impacted streams and drain ways. This plan shall include detailed options for removing the sediment and/or any other activities or measures to restore the stream, a detailed work plan for the proposed options, and a detailed schedule identifying streams and proposed activities dates required to complete the restoration work.
5. Within thirty (30) days after receiving the plan, TDEC shall complete its review and either approve the plan or provide written comments to TDOT identifying why the plan cannot be approved. In the event that TDEC does not approve the restoration plan as it is submitted, the Respondent shall, within thirty (30) days of receipt of TDEC's written comments on the plan, submit a revised version that includes the necessary changes to the plan. Within thirty (30) days after receiving the revised plan, TDEC shall complete its review and either approve the plan and issue a Notice to Proceed or provide additional written comments.
6. The Respondent shall, within thirty (30) days of receipt of TDEC approval of the restoration plan and Notice to Proceed, initiate the work identified in the approved plan and shall timely complete all work identified in the approved plan.

7. Preventive measures to be undertaken on the SR 840 site and future SR 840 South project:

- (a) The SR 840 site and the future SR 840 South project shall have erosion prevention and sediment control (EPSC) plans. The sediment basins and ditching in these plans shall be designed to manage the highest precipitation event possible, given the amount of right-of-way available, up to a twenty-five year, twenty-four hour rainfall event, but at a minimum these basins and ditches shall be designed to manage a two-year, twenty-four hour rainfall event. The overall goal of the EPSC plans shall be that no discharges will leave the site with turbidity or total suspended solids at levels higher than those established under paragraph XXXIV.A.7.(i), below. These EPSC plans shall be designed or reviewed by an independent consultant (who has CPESC certification or has substantial professional experience in soil erosion and sediment control and has been approved in writing by TDEC) who finds that the BMPs therein, if properly implemented, installed and maintained, are designed to manage erosion and prevent sediment accumulation in the waters of the state and comply with the terms of the General Permit. This finding shall be documented as provided in Exhibit A. On the future SR 840 South project, the EPSC plan and the Exhibit A documentation shall be provided to TDEC with the NPDES permit application or notice of intent.

- (b) Each EPSC plan for the SR 840 site and future SR 840 project shall specify the timing of implementation of the measures vis-à-vis construction of the road project. At a minimum, each EPSC plan shall require (i) that EPSC measures shall be in place before TDOT's contractor begins clearing, grubbing, excavation, grading, cutting or filling, except as such work may be necessary to install EPSC measures; (ii) that TDOT's contractor will not perform any clearing, grubbing, excavation, grading, cutting or filling in the months of December, January, February or March without the express prior approval of TDOT and TDEC; (iii) that areas to be excavated, graded, cut or filled shall not be cleared and grubbed more than ten (10) calendar days prior to beginning grading operations, unless temporarily stabilized; (iv) that at no time during construction shall there be more than twenty-five total acres of exposed soil (areas that do not have temporary or permanent stabilization) without the express prior approval of TDOT and TDEC of a project grading plan or other written document approved by TDOT and TDEC; and (v) that the EPSC measures and/or plan shall be modified as necessary so that they are effective at all times throughout the course of the project.
- (c) Each EPSC plan shall be fully and timely implemented and maintained.

- (d) TDOT and/or its contractor(s) shall conduct inspections of the EPSC measures, at least once a week, during any construction, and thereafter until the site is permanently stabilized.
- (e) TDOT and/or its contractor(s) shall install rain gauges in accordance with a plan approved by TDEC at all sites where clearing, grubbing, excavation, grading, cutting or filling is being actively performed, or exposed soil has not yet been permanently stabilized. TDOT and/or its contractor(s) shall check each gauge after every rainfall event occurring on these sites and maintain detailed records of rainfall events including dates, amounts of rainfall, and the approximate duration or starting and ending times. Inspections of EPSC measures shall also be performed before anticipated rainfall events and during, or within twenty-four hours after, any rainfall event that exceeds 0.5 inches.
- (f) TDOT and/or its contractor(s) shall make necessary maintenance and repair on EPSC measures within twenty-four hours after all inspections, unless conditions make a particular activity impracticable (any such conditions shall be documented). TDOT and/or its contractor(s) shall maintain records of inspections and corrective measures, including documenting photographs of representative items requiring correction and the corrective action taken for it.

- (g) The contract for the final segment of SR 840 South shall include a *Special Provision Regarding Erosion Control Supervisor (209ESC)*, substantially similar to the example which is attached hereto as Exhibit B. The wording of this *Special Provision* shall be subject to the approval of TDEC.
- (h) TDOT shall attend all public hearings held by TDEC on permit applications submitted by TDOT under the Act for any SR 840 South project, and be available to respond to questions related to the application, if any.
- (i) To determine the effectiveness of EPSC measures on the SR 840 site and future SR 840 South project, TDOT shall monitor streams in areas potentially impacted by active clearing, grubbing, excavation, grading, cutting or filling and until such areas are permanently stabilized, in accordance with a monitoring plan approved by TDEC (if clearing, grubbing, excavation, grading, cutting or filling occurs at a stream source, TDEC will approve the use of eco-region data or stream sample data obtained prior to clearing, grubbing, excavation, grading, cutting or filling to establish background and water characteristics). If in-stream turbidity increases more than 25 NTU (as determined using method 2130 B Turbidity, found in *Standard Methods for the Examination of Water and Wastewater*, 20th Edition, or some other method approved by TDEC) from the level in the upstream or control level,

TDOT shall evaluate the EPSC measures employed, repair or replace defective EPSC measures, and install, as applicable, additional or other EPSC measures with the goal of reducing downstream turbidity to less than in-stream background plus 25 NTU. TDOT shall also collect storm water samples during any rainfall event that exceeds 0.5 inches and analyze the collected samples for total suspended solids (TSS). The samples shall be collected at representative storm water outfalls as provided in a project-specific TSS monitoring plan to be submitted by TDOT for TDEC approval. Collected samples shall be analyzed in accordance with method 2540 D., Total Suspended Solids Dried at 103-105°C, which is found in *Standard Methods for the Examination of Water and Wastewater*, 20th Edition, or other method approved by TDEC. If TSS is more than 40 mg/l, TDOT shall evaluate the EPSC measures employed, repair or replace defective EPSC measures, and install, as applicable, additional or other EPSC measures with the goal of reducing the discharge of TSS to less than 40 mg/l. The 25 NTU and 40 mg/l standards described herein are established for the purpose of triggering the evaluation and correction of existing EPSC measures, and these standards may be modified upward or downward by the mutual consent of TDOT and TDEC.

- (j) As soon as possible, and in any event not more than ninety (90) days after the effective date of this Order, TDOT shall establish a Quality Assurance/Quality Control Team, which shall operate independently of TDOT's project supervisors. This team shall include individuals with environmental protection training or experience and who are approved by TDEC. This team shall inspect all areas in which clearing, grubbing, excavation, grading, cutting or filling has occurred on the SR 840 site and future SR 840 South project, including the potentially impacted streams, at least once each month until such areas are permanently stabilized. At sites that TDEC determines to be high quality waters or that have recurring problems, inspections will occur at least twice each month. All inspection reports shall be provided simultaneously to both TDEC and TDOT.
- (k) If TDOT clearly demonstrates that EPSC measures on the SR 840 site or the future SR 840 South project were properly designed, installed and maintained in compliance with the EPSC plan for that site, then, in that event, impacts to the waters of the state that result from a storm event that clearly exceeds a twenty-five year, twenty-four hour rainfall event will not be considered a violation of this Consent Order. However, in that event, TDOT and its contractor(s) shall be responsible for any remedial actions deemed necessary by TDEC to mitigate any damages caused by such

impacts. TDEC will consider in any possible enforcement action against TDOT the magnitude or unusual nature of the rainfall, the actions taken by TDOT to design, install and maintain sediment control measures and all other actions taken by TDOT to monitor, evaluate and correct existing EPSC measures in accordance with this Consent Order.

- (l) To the extent that any term in this Consent Order conflicts with any material term of any pre-existing consent order or the "General Notes" section for those Storm Water Pollution Prevention Plans currently in use on the SR 840 site, this Consent Order shall supersede and control in all instances where the Consent Order sets more strict or comprehensive requirements.
- (m) With regard to the performance of any clearing, grubbing, excavation, grading, cutting or filling whether or not currently permitted which has not yet been done as of the effective date of the Consent Order, and specifically with regard to those areas affecting the unnamed tributaries to Locke Branch subject to ARAP and 404/401 permit approvals as of the same date, TDOT shall fully comply with the provisions of paragraph XXXIV.A.7.(a) through (k) above. The contractor, Vaughn, shall not be allowed to proceed with clearing, grubbing, excavation, grading, cutting or filling in any areas until these preventive measures as set forth are fully met.

- (n) TDEC will not make a final decision on TDOT's pending application for a section 401 certification for stream and wetlands crossings in the Kelley Creek watershed until after the effective date of this Consent Order.
8. Stream surveys to be undertaken on the future SR 840 South project:
- (a) Prior to letting the final segment of SR 840 South to bid for construction, TDOT will conduct a walk-through with TDEC to view all watercourses to determine which are streams that may be impacted by clearing, grubbing, excavation, grading, cutting or filling. The results of this walk-through will be submitted with TDOT's permit application or notice of intent.
 - (b) In addition, based on the streams identified during this walk-through, TDOT will formulate a plan, that must be approved in writing by TDEC, for conducting pre-construction stream surveys. These stream surveys will be conducted by TDOT and/or its consultant(s) prior to submitting any permit application or notice of intent to TDEC.
 - (c) These surveys shall include one upstream and four downstream stations on each stream designated in the study plan. Stations shall be selected by a professional biologist, and will be marked for post-construction repeatability. TDEC may approve an alternative survey design when circumstances warrant (for example, when little or no upstream area exists or an alternative sampling protocol

would yield more useful information). Any such approval shall be in writing.

- (d) These surveys shall include an analysis of habitat, stream morphology, water quality, benthic macroinvertebrates and fish.
- (e) These surveys will be conducted during the period of April 1 through June 30 or October 15 through December 15 for macroinvertebrates, and during the period of April 1 through September 30 for fish.
- (f) The protocol to be used for the survey of benthic macroinvertebrates is found in State of Tennessee Department of Environment and Conservation, Division of Water Pollution Control Quality System Standard Operating Procedure for Macroinvertebrate Stream Surveys, March 2002. The survey shall follow the procedures specified in I.I, Protocol G. Field Collection Techniques for Semi-Quantitative Single Habitat Sample (SQKick or SQBank) a. Semi-Quantitative Riffle Kick (SQKICK) or b. Modified SQKICK (small streams).
- (g) The protocol to be used for the survey of fish is found in Tennessee *Biological Standard Operating Procedures Manual: Volume II: Fish Communities*, March 1996. TDOT or its consultant(s) performing the stream survey shall follow the procedures specified in Section II, Protocol for Conducting an Index of Biotic Integrity Biological Assessment, through Section IV, IBI Analysis.

However, electrofishing will not be used in stream reaches, if any, known to have official state or federally listed threatened or endangered fauna.

- (h) A report of the findings made for each of these stream surveys shall be submitted to TDEC with the ARAP application. Four copies shall be submitted to TDEC.
- (i) Following final stabilization, TDOT and/or its consultant(s) shall conduct post-construction surveys of the same streams along the final segment of SR 840 South. The same survey stations and methods will be used as in the pre-construction surveys. These surveys will be conducted in the first appropriate time of year for such stream survey following final stabilization.
- (j) If sedimentation or water quality degradation attributable to the construction project is found during the post-construction stream survey, TDOT and/or its consultant(s) shall prepare and submit four copies of a corrective action plan to TDEC for approval. Within thirty (30) days after receiving the plan, TDEC shall complete its review and either approve the plan or provide written comments to TDOT identifying why the plan cannot be approved.
- (k) Following approval of the plan, TDOT shall initiate approved corrective actions within fifteen (15) days of TDEC's written notice to proceed, unless TDOT states in writing that a longer time period is required in order for it to comply with applicable

procurement requirements, including without limitation the Brooks Act, in which case TDOT shall initiate the corrective actions within the stated time period. The corrective actions shall be completed in accordance with the approved schedule.

B. SR 26 Site Corrective Action

1. To the extent that there remains any exposed soil at the SR 26 site that has not already been permanently stabilized as of the effective date of this Order, the Respondent shall as soon as possible, but no later than seven (7) days after the effective date of this Order, implement appropriate EPSC measures designed by a professional engineer or other qualified and licensed professional to prevent additional material leaving the SR 26 site and entering waters of the state.
2. To the extent that any clearing, grubbing, excavation, grading, cutting or filling remains to be done at the SR 26 site as of the effective date of this Order, no such work on the SR 26 site shall occur prior to implementation of EPSC measures required by paragraph XXXIV.B.1, above. Upon completing installation of EPSC measures, the Respondent shall contact TDEC and arrange for an on-site review of the EPSC measures. A report including design considerations and explanation of rationale for selected techniques, and discussion of selected control measures and expectation of subsequent discharge, shall be provided to TDEC by the design professional at least fifteen (15) days prior to the on-site review. No further disturbance of this SR 26 site is authorized after the effective date

of this Order until TDEC has reviewed the design and conducted said on-site review. Six copies of the report are to be provided to TDEC for review. TDEC shall conduct the on-site review within one week of notice from TDOT of a date for such review and its agreement that clearing, grubbing, excavation, grading, cutting or filling activities may proceed will not be unreasonably withheld.

3. To the extent that the Respondent has not already done so, the Respondent shall, within thirty (30) days of the effective date of this Order, submit to the Division for review and approval a plan to assess the degree of sediment contribution and assess other causes of pollution (iron and/or other minerals and salts) from construction activities on the SR 26 site to waters of the state. The plan shall, at a minimum, include a detailed schedule of work and detailed discussion of the assessment methodology proposed.
4. Within thirty (30) days after receiving the plan, TDEC shall complete its review and either approve the plan or provide written comments to TDOT identifying why the plan cannot be approved. In the event that TDEC does not approve the assessment plan as it is submitted, the Respondent shall, within thirty (30) days of receipt of written comments on the plan, submit a revised version that makes the necessary changes to the plan. Within thirty (30) days after receiving the revised plan, TDEC shall complete its review and either approve the plan or provide additional written comments.

5. The Respondent shall initiate assessment activities, within fifteen (15) days of TDEC's approval of the assessment plan, unless TDOT states, in writing, that a specified longer time period is required in order for it to comply with applicable procurement requirements including without limitation the Brooks Act, in which case it shall initiate the assessment activities within the stated time period.
6. The Respondent shall, within thirty (30) days of completion of the assessment, submit to TDEC for approval a plan for the restoration of impacted streams and drain ways. This plan shall include detailed options for removing the sediment and/or any other activities or measures necessary to restore the stream, a detailed work plan for the proposed actions, and a detailed schedule identifying streams and proposed activities dates required to complete the restoration work.
7. Within thirty (30) days after receiving the plan, TDEC shall complete its review and either approve the plan or provide written comments to TDOT identifying why the plan cannot be approved. In the event that TDEC does not approve the restoration plan as it is submitted, the Respondent shall, within thirty (30) days of receipt of written comments on the plan, submit a revised version to TDEC that makes the necessary changes to the plan. Within thirty (30) days after receiving the revised plan, TDEC shall complete its review and either approve the plan and issue a Notice to Proceed or provide additional written comments.

8. The Respondent shall, within thirty (30) days of receipt of TDEC's approval of the restoration plan and Notice to Proceed, initiate the work identified in the approved plan and shall timely complete all work identified in the approved plan.
9. To the extent that the Respondent has not already done so, the Respondent shall, within thirty (30) days of receiving TDEC approval of the assessment plan, initiate assessment of the streams that cross the right-of-way from ARAP permit site NRS 64 to NRS 67. Within thirty (30) days of initiation, the assessment shall be completed and a corrective action plan shall be submitted to TDEC. The corrective action plan shall include, without limitation, a provision for a final assessment of the success of the work during low flow conditions and for further corrective action to be taken if that low flow assessment shows that it is needed.
10. Within thirty (30) days after receiving the plan, TDEC shall complete its review and either approve the plan or provide written comments to TDOT identifying why the plan cannot be approved. In the event that TDEC does not approve the corrective action plan as it is submitted, the Respondent shall, within thirty (30) days of receipt of written comments on the plan, submit a revised version to TDEC that makes the necessary changes to the plan. Within thirty (30) days after receiving the revised plan, TDEC shall complete its review and either approve the plan and issue a Notice to Proceed or provide additional written comments.

11. The Respondent shall, within thirty (30) days of receipt of approval of the corrective action plan and Notice to Proceed, complete all work identified in the approved plan.
12. To the extent that the Respondent has not already done so, the Respondent shall, within thirty (30) days of the effective date of this Order, submit a proposal to TDEC to mitigate for the filling of a spring and unnamed tributary to Drivers Branch located near TDOT Station 2+837.
13. Within thirty (30) days after receiving the plan, TDEC shall complete its review and either approve the plan or provide written comments to TDOT identifying why the plan cannot be approved. In the event that TDEC does not approve the mitigation proposal as it is submitted, the Respondent shall, within thirty (30) days of receipt of TDEC's written comments on the proposal, submit a revised version to TDEC that makes the necessary changes to the proposal. Within thirty (30) days after receiving the revised plan, TDEC shall complete its review and either approve the plan and issue a Notice to Proceed or provide additional written comments.
14. The Respondent shall, within thirty (30) days of receipt of TDEC's approval of the mitigation proposal and Notice to Proceed, initiate the work identified in the approved plan and shall timely complete all work identified in the approved plan.

C. Development of a Statewide Storm Water Management Plan

1. Within 18 months of the effective date of this Order, or such additional time as TDEC may approve for good cause, TDOT shall develop a

Statewide Storm Water Management Plan (hereinafter referred to as the "Plan"). The Plan will be comprehensive and will incorporate all appropriate phases of project development, including environmental planning, design and construction.

2. TDOT will immediately form a working group to initiate formulation of the Plan. At a minimum, the group will include representatives with substantial experience in the following disciplines: environmental protection, design, construction, hydraulics, maintenance, and material testing.
3. In addition, TDOT will initiate the steps necessary to select an outside expert to guide and assist in the development of the Plan. TDOT's selection will be subject to TDEC's approval.
4. TDOT will implement a process, subject to the approval of TDEC, providing for public review and comment during the development of the Plan. At a minimum, TDEC and TDOT shall hold at least three (3) public meetings, at least one in each grand division of the state, to receive comment from the public.
5. The completed Plan shall be subject to TDEC approval. With TDEC's concurrence, parts of the Plan may be approved and implemented prior to final approval of the completed Plan.
6. At a minimum the completed Plan shall include the following elements:
 - (a) Procedures describing TDOT's project planning activities, including the development of project alternatives, environmental

analysis and selection of final alignment, and these procedures will incorporate the consideration of analyzing the potential impact of increased flows of storm water runoff events, and consideration of a no-build option and of project alternatives or designs that avoid or minimize impacts to the waters of the state;

- (b) Investigation, evaluation and development of state-of-the-art erosion prevention and sediment control BMPs;
- (c) Consideration of the use of specific erosion prevention controls that, through published comparative test data, have been shown to result in a 90 to 100 percent erosion reduction from bare soil;
- (d) Development of BMP guidelines that describe appropriate usage and proper implementation;
- (e) Continuing training of TDOT personnel within all TDOT Divisions having responsibility for any aspect of storm water management, including without limitation Environmental Planning and Permits, Design and Construction, and consideration of higher-level training course(s) to be developed in concert with TDEC;
- (f) Review of TDOT construction contract provisions related to erosion prevention and sediment control, including consideration of limits on the length of time that soils are left exposed, the total area of exposed soil during construction, and periods of the year during which clearing, grubbing, excavation, grading, cutting or filling will not occur;

- (g) Independent review of erosion prevention and sediment control plans;
- (h) Consideration of the continued use of independent erosion prevention and sediment control supervisors for construction projects requiring ARAP or NPDES permits;
- (i) Development of Quality Assurance/Quality Control teams to conduct an appropriate level of review of construction projects requiring ARAP or NPDES permits, provide recommendations for improved practices, and provide training for construction personnel;
- (j) Evaluation of water quality monitoring protocols to assist in evaluating the effectiveness of erosion prevention and sediment control practices;
- (k) Evaluation of compliance requirements for contractors relating to storm water management, including incentives and disincentives;
- (l) Identification of all potentially impacted waters of the state in the erosion prevention and sediment control plans;
- (m) Consideration of incorporating erosion prevention and sediment control requirements for contractor-provided waste and borrow areas; and
- (n) Provision for periodic review of the Plan, including the opportunity for public input.

7. Interim measures pending approval of the Plan.

- (a) Except as this Order may otherwise specifically provide with respect to SR 840 and SR 26, the provisions of this section of the Order (XXXIV.C.7.) shall apply as indicated to each of TDOT's ongoing or future road projects requiring an NPDES permit until such time as the Plan, or any part of the Plan, has been approved by TDEC for implementation. To the extent that activity on any road project has already progressed to a stage that it is not practical to implement any of the interim measures identified below, these provisions shall not apply to that stage of work unless TDEC disagrees, in writing, to the contrary; however, these provisions shall apply to the remaining stages of work. Upon final approval, the Plan shall supersede the interim provisions of this section. To the extent that any part of the Plan has been approved for implementation prior to final approval of the completed Plan, that part of the Plan shall supersede the interim provisions of this section dealing with the same subject matter.
- (b) All ongoing and future projects requiring an NPDES permit shall have erosion prevention and sediment control (EPSC) plans. Each EPSC plan shall specify the timing of implementation of the measures vis-à-vis construction of the road project. At a minimum, each EPSC plan shall require (i) that erosion prevention and sediment control measures be in place before clearing,

grubbing, excavation, grading, cutting or filling occurs, except as such work may be necessary to install EPSC measures; and (ii) that the EPSC measures and/or plan shall be modified as necessary so that they are effective at all times throughout the course of the project. In addition, each EPSC plan shall address periods of the year during which clearing, grubbing, excavation, grading, cutting or filling will not occur and limitations on the total area of exposed soil (areas that do not have temporary or permanent stabilization) at any time during construction. These EPSC plans shall be designed or reviewed by an independent consultant (who has CPESC certification or has substantial professional experience in soil erosion and sediment control and has been approved, in writing, by TDEC) who finds that the BMPs therein, if properly implemented, installed and maintained, are designed to manage erosion and prevent sediment accumulation in the waters of the state and comply with the terms of the General Permit. This finding shall be documented as provided in Exhibit A. These EPSC plans and the Exhibit A documentation shall be provided to TDEC with the NPDES permit application or notice of intent.

- (c) Each EPSC plan shall be fully and timely implemented and maintained.
- (d) TDOT and/or its contractor(s) shall conduct inspections of EPSC measures and potentially impacted streams, at least once per week,

during any construction, and thereafter until the site is permanently stabilized.

- (e) Prior to final approval of the Plan, but in any event not more than 180 days after the effective date of this Order, TDOT shall establish additional Quality Assurance/Quality Control Teams, which shall operate independently of TDOT's project supervisors. These teams shall include individuals with environmental protection training or experience and who are approved by TDEC. These teams shall inspect all areas on which clearing, grubbing, excavation, grading, cutting or filling has occurred on projects, including the potentially impacted streams, at least once a month until such areas are permanently stabilized, or as provided in approved interim provisions of the Plan. At sites that TDEC determines to be high quality waters or that have recurring problems, inspections will occur at least twice each month, or as provided in approved interim provisions of the Plan. All inspection reports shall be provided simultaneously to both TDEC and TDOT, or as provided in approved interim provisions of the Plan.
- (f) TDOT and/or its contractor(s) shall install rain gauges in accordance with a plan approved by TDEC at all sites where clearing, grubbing, excavation, grading, cutting or filling is being actively performed, or exposed soil has not yet been permanently

stabilized. TDOT and/or its contractor(s) shall check each gauge after every rainfall event occurring on these sites and maintain detailed records of rainfall events including dates, amounts of rainfall, and the approximate duration or starting and ending times. Inspections of EPSC measures shall also be performed before anticipated rainfall events and during or within twenty-four hours after any rainfall event that exceeds 0.5 inches.

- (g) TDOT and/or its contractor(s) shall make necessary maintenance and repair on EPSC measures within twenty-four hours after all inspections, unless conditions make a particular activity impracticable (any such conditions shall be documented). TDOT and/or its contractor(s) shall maintain records of inspections and corrective measures, including documenting photographs of representative items requiring correction and the corrective action taken for it.
- (h) Any time that TDOT becomes aware that sedimentation is occurring or has occurred in streams impacted by an on-going project, TDOT shall evaluate the EPSC measures employed, repair or replace defective EPSC measures, and install, as applicable, additional or other EPSC measures with the goal of eliminating future sedimentation.

- (i) TDOT shall attend all public hearings held by TDEC on permit applications submitted by TDOT under the Act, and be available to respond to questions related to the application, if any.

D. Storm Water Management Research Projects

1. TDOT and TDEC shall select eight road projects across the State, including the two ongoing SR 840 projects, to provide research data and information to be used in development of the Statewide Storm Water Management Plan. The goals of this research project shall include:
 - (a) Evaluation of the effectiveness of EPSC Plans;
 - (b) Usefulness of turbidity and TSS data collection and evaluation of the levels of turbidity and/or TSS, if any, that should trigger evaluation and repair of EPSC measures; and
 - (c) The specific research approach for these research projects will be developed by TDOT, in coordination with and subject to the approval of TDEC, with the goal of answering clearly defined questions.
2. In addition, to evaluate the impact, if any, of road construction on the waters of the state, TDOT and TDEC shall select eight road projects across the State, including the one future SR 840 project.
 - (a) The goal of these research projects shall be to evaluate the effects of measured turbidity and TSS levels, and the effects of any visible construction sediment deposits, on stream biota, based on pre-construction and post-construction stream surveys.

- (b) The sample design for these research projects will be similar to that set forth in Paragraph XXXIV.A.8. for the future SR 840 project.
- (c) The projects selected will be reviewed prior to letting of the construction contract to ensure that the construction schedule and the biological data collection schedules are compatible with the goals of the research.
- (d) The specific research approach for these research projects will be developed by TDOT, in coordination with and subject to the approval of TDEC, with the goal of answering clearly defined questions.

E. Construction Contract Management

1. After 90 days from the effective date of this Order, each TDOT contract entered into for a project in which a general or individual NPDES permit or an ARAP is required shall include a requirement that the Contractor's (Contractor is defined in §101.17 of TDOT's *Standards of Construction for Road and Bridge Construction*) project supervisor(s) successfully complete TDEC's *Fundamentals of Erosion and Sediment Control*, or the successor or equivalent course from other sources subject to TDEC approval, and such approval is not to be unreasonably withheld.
2. After 90 days from the effective date of this Order, each TDOT contract entered into for a project in which a general or individual NPDES permit or an ARAP is required shall provide that the contractor shall cease work

on part or all of a project when directed to do so by a TDOT project inspector or project supervisor because of inadequate EPSC measures.

3. TDOT shall, within ninety (90) days of the effective date of this Order, file a Notice of Rulemaking Hearing with the Secretary of State, commencing a rulemaking proceeding that will establish a system for contractor certification and contractor suspension relating to the ability of a contractor to bid on highway construction projects involving certain waters of the state (e.g., high quality waters, impaired waters). TDOT shall file the final rules with the Secretary of State, pursuant to T.C.A. § 4-5-206, no later than three hundred sixty-five (365) days after the filing of the Notice of Rulemaking Hearing, except with the consent of TDEC for good cause.
4. After 90 days from the effective date of this Order, each TDOT contract entered into for a project in which a general or individual NPDES permit or an ARAP is required shall include disincentives for environmental violations similar to the current ones for late completion. If TDEC issues a Notice of Violation to a TDOT Contractor for work on or related to a TDOT road project, TDOT shall be sent a copy by TDEC.

F. Education and Certification

1. Within one year of the effective date of this Consent Order, TDOT shall have two or more staff positions filled in its office that have expertise in, and are involved in the design or review of EPSC plans. Minimum qualifications for these positions shall include a Bachelors level degree in engineering, soil science, or geology or a related field, and four years

professional experience with prevention of soil erosion and sediment control. These people shall have also successfully completed TDEC's *Design of Vegetative and Structural Measures for Erosion and Sediment Control* course, or its successor or equivalent course from other sources subject to TDEC approval. These people shall also obtain the CPESC certification as soon as possible after they have the required experience. The documentation of all such experience and certification shall be submitted to TDEC.

2. TDOT project inspectors and project supervisors who are responsible for implementation and maintenance of EPSC plans shall successfully complete TDEC's *Fundamentals of Erosion Prevention and Sediment Control* course, and TDOT's project supervisors shall also successfully complete TDEC's *Design of Vegetative and Structural Measures for Erosion and Sediment Control* course, or their successors or equivalent courses from other sources subject to TDEC approval, within eighteen (18) months of the effective date of this Consent Order.

G. Public Review

1. TDEC and TDOT shall provide an opportunity for public comment on how well the provisions of the Consent Order have worked during the public meetings held to receive public comment on the development of the Statewide Storm Water Management Plan, as provided in paragraph XXXIV.C.4. of this Consent Order.

2. Within four months after the completion of the research project provided for in paragraph XXXIV.D.2. of this Consent Order, TDEC and TDOT will make the results of that research available to the public and shall schedule at least two (2) public meetings to receive comment from the public relative to the research results.
3. Copies of any assessments, plans, reports or other documents that TDOT is required to submit to TDEC under this Consent Order shall be also be made available for public inspection upon request being made to TDOT's Office of Constituent Services.

H. Civil Penalty

TDOT estimates that the activities required by this Order will require that TDOT expend a sum in excess of TEN MILLION DOLLARS. That sum was taken into account in the assessment of the following civil penalty. Therefore, the Respondent shall pay to the Division a CIVIL PENALTY in the amount of EIGHT HUNDRED THOUSAND DOLLARS (\$800,000.00), payable as follows:

1. The Respondent shall submit payment of TWO HUNDRED THOUSAND DOLLARS (\$200,000.00) to the Division of Water Pollution Control within THIRTY (30) DAYS of the effective date of this Order.
2. The Respondent shall submit payment of TWENTY-FIVE THOUSAND DOLLARS (\$25,000.00) to the Division of Water Pollution Control each time that the Respondent fails to timely comply with any provision of Section A. above up to a total of ONE HUNDRED THOUSAND

DOLLARS (\$100,000.00). This payment is to be submitted within thirty (30) days of receipt of a Notice of Violation for any such failure.

3. The Respondent shall submit payment of TWENTY-FIVE THOUSAND DOLLARS (\$25,000.00) to the Division of Water Pollution Control in the event of any future incident of sedimentation, from activities on SR 840 or SR 26, that results in an accumulation of sediment in excess of one half inch in depth in the waters of the state, except as provided in paragraph XXXIV.A.7.(k) of this Consent Order, up to a total of ONE HUNDRED FIFTY THOUSAND DOLLARS (\$150,000.00). This payment is to be submitted within thirty (30) days of receipt of a Notice of Violation for any such failure. Payment of this assessment does not prevent additional assessments by TDEC for any such event in a separate action, which would be subject to appeal by TDOT.
4. The Respondent shall expend THREE HUNDRED FIFTY THOUSAND DOLLARS (\$350,000.00) on supplemental environmental projects to be approved by TDEC over the next two years following the effective date of this Consent Decree. Documentation of the amounts spent shall be made available to TDEC upon request.

I. Termination

If this Consent Order is filed with the Chancery Court of Davidson County, the Court will retain jurisdiction to enforce this Consent Order for a period of five years, unless the term is extended or shortened by order of the Court as provided below. The parties agree that, at the end of the five-year term, this matter shall be automatically

dismissed, with prejudice, in the absence of a motion by TDEC to extend this Court's jurisdiction, which motion must be supported by good cause, and which may be opposed by TDOT. Any motion to extend the term of this Consent Order must be filed at least ninety (90) days prior to the expiration of the five-year term. The failure to file a timely motion for an extension shall constitute an express waiver of the right to do so, and shall be construed as the affirmative agreement of TDEC to the automatic dismissal of this matter, with prejudice. Either party may file a motion to shorten or extend the Court's jurisdiction, which motion must be supported by good cause, and which the other party may either oppose or join.

J. The Respondent shall otherwise conduct business in accordance with the Act and rules promulgated pursuant to the Act. Further, the Respondent is advised that the foregoing Consent Order is in no way to be construed as a waiver, expressed or implied, of any provision of the law or regulations. However, compliance with the Consent Order will be one factor considered in any decision whether to take enforcement action against the Respondent in the future.

WAIVER OF RIGHT TO APPEAL

XXXV.

Respondent understands that it has a right to appeal this Order pursuant to T.C.A. Sections 68-3-109, 69-3-110 and 4-5-301 *et seq.* The Respondent knowingly and voluntarily waives these appeal rights for this Consent Order and Agreement as it is executed by the Commissioners. Both parties reserve their rights to seek judicial appeal

if the Chancery Court enters an order that differs from this Consent Order and Agreement.

RESERVATION OF RIGHTS

XXXVI.

Both TDOT and TDEC recognize that corrective actions required by this Order go beyond the actions that can be required under current water quality rules. Both TDOT and TDEC believe that the benefits of this Consent Order for the environment outweigh the need for either party to litigate the facts and conclusions of law.

TDOT does not admit or agree to the factual allegations or the alleged violations of law contained in this Consent Order. TDOT agrees to comply with Section XXXIV of this Consent Order to avoid the cost of protracted litigation and to voluntarily promote greater environmental protection. TDOT reserves the right to contest the factual allegations and alleged violations contained in this Consent Order in any proceeding other than a proceeding brought by TDEC to enforce the terms of this Consent Order or the Chancery Court Order that may be filed pursuant to T.C.A. §69-3-115(e). If this Consent Order is filed in Chancery Court and third party intervention, under T.C.A. §69-3-115(e)(2), is allowed by the Court, then TDOT reserves the right to contest the factual allegations and alleged violations contained in this Consent Order.

The Commissioner of TDEC makes her findings of fact and violations of law based upon the investigation of her staff.

TDEC reserves the right to assert with TDOT or in other matters that incidents of sedimentation less than one half inch in depth may cause a condition of pollution as

identified in T.C.A. § 69-3-101 *et seq.* That figure is used in paragraph XXXIV.H.3. for certainty of administration of this Consent Order not as a demarcation of a level at which harm occurs to fish and aquatic life.

Nothing in this Consent Order shall be construed to limit TDOT's authority in the future to promulgate rules regarding contractor qualifications and/or conditions for bidding on or participating in construction contracts, including without limitation provisions for the suspension and/or debarment of contractors.

Nothing in this Consent Order shall be interpreted as providing a turbidity or TSS allowance within which no violation of the General Permit may be found. TDEC specifically reserves the right to enforce all the terms of the General Permit regarding the narrative limitations on turbidity and suspended solids even in those events where the collected samples evidence turbidity exceeding 25 NTU above background and inspections are ongoing in accordance with paragraph XXXIV.A.7.(i) of this Consent Order.

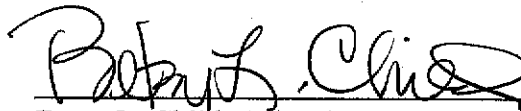
Nothing in this Consent Order shall be interpreted to inhibit or impede in any way the right of any person or organization to seek in Chancery Court or Circuit Court the abatement of a nuisance occurring in relation to any road-building activity or grading activity including but not limited to seeking the abatement of objectionable turbidity, settleable solids, or sediment deposits on privately-owned land. Neither TDEC nor TDOT intends this Consent Order to be used either to assist or impede the pending action, *Noel v. Vaughn Contractors, Inc.*, Williamson Chancery No. 29175, or any other pending or future litigation.

TDEC and TDOT reserve the right by mutual agreement to modify provisions of this Consent Order based on experience and information gathered in accordance with this Order. TDEC and TDOT will provide public notice and an opportunity for public comment prior to making any modification to this Consent Order. Such public notice of any proposed modification will be posted on each agency's website and by letter to the outside parties that have participated in the drafting of this Amended Consent Order.

SIGNATURES

3-10-04

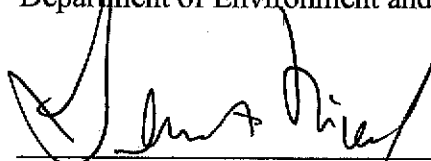
Date



Betsy L. Child, Commissioner
Department of Environment and Conservation

3-10-04

Date



Gerald F. Nicely Commissioner
Department of Transportation

EXHIBIT A

I _____ am currently CPESC certified (or have substantial professional experience in soil erosion and sediment control and have been approved in writing by TDEC to review EPSC plans). I have reviewed the EPSC plan for the TDOT project known as _____ and I find that the BMPs therein are designed so that, if properly implemented, installed and maintained, they will manage erosion and prevent sediment accumulation in the waters of the state and comply with the terms of the General Permit.

Date: _____

Signature